GLANFORD BRIGG RURAL DISTRICT COUNCIL

ANNUAL REPORT

OF THE

MEDICAL OFFICER OF HEALTH

1968

Medical Officer of Health

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Mrs. M. M. Rousell commenced October, 1968.

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Clerks: Miss White, Mrs. Robinson left February 1968,
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Vice Chairman - Councillor D.W. Johnson

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J. Wilson
P.B. Wilson
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I N D E X

50, Holydyke,

Barton-on-Humber.

August, 1969.

Mr. Chairman, Ladies and Gentlemen,

The most striking feature of the mortality figures for 1968 is the high proportion of deaths due to Ischaemic Heart Disease. Altogether 399 people died in the year, and of these 17 were babies under one year of age. No less than 97 of the remaining 382 deaths were attributed to Ischaemic Heart Disease (formerly known as "Coronary Disease and Angina"). Thus, over a quarter of all adult deaths were due to this one cause, which is the one statistically most closely related to the drinking of soft water.

Only on rare occasions is it possible to take a simple and inexpensive action which will lead to far reaching benefit to the health of the public. Such a situation arose during 1968. There can be little doubt that the decisions taken by the North Lindsey Water Board in July 1968 and March 1969 that the hardness of the water which they distribute be substantially increased will have a profound effect upon mortality in this area, and result in a reduction in deaths from ischaemic heart disease, and in deaths in middle age from other causes.

Our water supplies come from deep boreholes in chalk and in limestone, and the water is naturally very hard. In 1958 and 1959 water softening plant was commissioned at the main sources of supply and the hardness of the waters distributed was reduced from about 375 mg/L hardness to 60 mg/L hardness. This was done because of public demand for softer water, and at the time there was no suspicion that it might be detrimental to health.

In 1957, however, while our softening plant was still under construction, Kobayshi was discovering differences in cardiovascular mortality rates between parts of Japan where the water was hard and parts where it was soft. Studies in the U.S.A. by Shroeder in 1960 and in 1961 in this country by Morris, Crawford and Heady confirmed the relationships. It was, however, still suspected that the effect might be due to the kind of industries which were attracted to soft water areas and not due to any direct effect of soft water on health. In April 1968 Crawford, Gardiner and Morris published a second study comparing mortality rates in 61 cities in England. Their findings showed that it was highly unlikely that social or occupational differences could be responsible. Towns with soft drinking water supplies had substantially higher death rates in middle age and early old age than those whose water was hard.

There was no proof at that time that hard water whose calcium content had been artificially reduced was harmful, and before taking any action the Water Board requested studies of our local populations. These studies showed that areas supplied with softened water by the North Lindsey Water Board had substantially higher mortality rates than had comparable areas supplied with hard water by a neighbouring water board. In each case the actual mortality rates observed were of the same order of magnitude as those found by Crawford et al in towns with water naturally of the same degree of hardness.

Since this strongly suggested that softening might be harmful to health the Water Board made a temporary increase in hardness to 120 ppm. and asked me to compare mortality rates before and after the introduction of softening. With the help of data from the Registrar General and from Dr. S. Childs of Scunthorpe, I was able to show that before the introduction of water softening mortality rates for Scunthorpe were substantially lower than those for Grimsby. During the following years mortality rates for England and Wales fell and the rates for Grimsby had fallen steeply. Mortality rates for Scunthorpe, however, had not followed the national trend but had risen sharply. These changes had occurred over a relatively short period of time, and it seemed unlikely that any social or economic factor could have caused them. The environmental changes which had occurred, such as the implementation of the Clean Air Act, would have tended to reduce mortality. No reasonable doubt remained, therefore, that the rise in mortality probably resulted from the consumption of softened water, and the Water Board decided to increase the hardness of the water they distribute by stages up to 225 ppm.

The mechanism by which the hardness of water affects mortality is unknown. The effect cannot be on the development of artery disease since this takes many years to develop and the change in mortality occurred very soon after the change in the water. Surveys have shown that narrowing of arteries is as common in hard as in soft water areas, but coronary thrombosis and premature deaths from all causes are commoner in soft than in hard water areas. The biggest difference between hard and soft water areas is in respect of sudden deaths from coronary disease. Smaller differences, however, are found in almost every cause of death. The evidence suggests that hard water does not stop arteries from narrowing, but only influences the heart's ability to go on working in the presence of disease or oxygen lack.

Although we do not know how the effect is produced we are already clearly in a position to benefit from it. If removing calcium from water increases mortality we do not need to wait until we understand how it does so before increasing the hardness again. In our area the matter is a straightforward one. As our water is naturally hard we only need to treat a smaller proportion of it. We do not need to add lime salts artificially.

Very large numbers of people in other parts of England, Scotland and Wales drink naturally soft water. Whether or not proposals to "harden" such naturally soft water would meet opposition from the proponents of "pure water" may depend upon whether the calcium acts directly or indirectly on man. Presumably if it acts by rendering the water less liable to dissolve poisonous metals from pipes it would, like chlorination be accepted. If, however, it is found to act directly on the human body we may expect the same heated opposition which had been voiced against fluoridation.

As mans need of it, both for potable supply and for industrial purposes, outstrips available sources of high quality water he will increasingly have to resort to low quality sources, and ultimately to the sea. The need for chemical treatment to make the water potable and beneficial rather than harmful to health will thus become more apparent and we may hope more generally accepted in time.

In our area the available local sources of high quality potable water are already fully exploited, and to meet the needs of the immediate future a scheme to combine waters from the Trent, Witham and Ancholme rivers is being prepared. Owing to the excessive load of pollution carried by the river Trent, and uncertainty about the safety of drinking such water even after purification, the water from this scheme is scheduled to be used solely for industrial purposes initially. Clearly, if this water is to be made fit and safe for people to drink sophisticated treatment will be necessary. Before the growth of population reaches the level when such water has to be used for drinking we must hope that the public will have come to terms with the concept that "potable" water is water whose consumption by man will not be detrimental to health, and discard the concepts of "Pure Water" and "Natural Water".

Vital Statistics

The Registrar General's estimate of mid-year population for 1968 was 42,690 reflecting a considerable migratory increase of 2,280 on top of the natural increase of 410. There were 882 live births and a corrected birth rate of 20.5, the high rate being due to the high proportion of people of reproductive age among the migrants entering the district. The perinatal mortality rate, infant mortality rate, neonatal and early neonatal mortality rates and stillbirth rates are all slightly higher than those for England and Wales as a whole, the main contribution towards the adverse perinatal mortality rate being the marked rise in incidence of stillbirths. There were 16 stillbirths in 1968 compared with 10 in 1967 and in 1966 there were 9.

At 10.2 our corrected death rate is favourable. Apart from ischaemic heart disease (97 deaths) the main causes of death in 1968 were cerebrovascular disease (65 deaths), the cancers (69), pneumonia (25), bronchitis (15) and motor accidents (13).

Infectious Diseases

The introduction of measles vaccine was delayed just too long for any significant effect to be shown in our infectious disease notifications. 359 cases were notified in the year. At 77 cases compared with 38 in 1967 the incidence of dysentery appears to have increased sharply. As usual it has been most prevalent in the area near Scunthorpe where there are large residential caravan sites. Only 28 cases of whooping cough were notified compared with 129 in 1967. The figures are tabulated in an unusual way this year because new Regulations amending the list of notifiable diseases came into force for the last quarter of the year.

Some Problems of Old People

One of the most unpleasant duties of a Medical Officer of Health is that of compulsorily removing to hostel or hospital an elderly infirm or sick person who lives in insanitary conditions, is not being looked after and who must for his own safety or the safety of others, be taken into care. Each year I have a number of such cases to handle, and a great many more are reported which on investigation fail to comply with the requirements of the Act. Typically one finds an old lady, living as a kind of recluse alone in a cottage. She is seated in a chair wrapped in an old coat and surrounded by empty tins, milk bottles, wrapping paper, crumbs, mouldy remnants of food and dirty pots. For several weeks she has felt too poorly to make the effort to go to her bedroom to sleep, and for the past few days has been too weak to get out of her chair at all. In consequence she is sat in a pool of urine and faeces. She may have been without food for several days. As a result of sitting for so long her legs have become terribly swollen and she cannot get her shoes on. There is dust and dirt everywhere and a nauseating smell. It is dark, as the windows have not been cleaned for years, are small and half blocked by rubbish stacked on the sills. Having established whether she needs hospital treatment or could be cared for in a hostel, and having failed to persuade her to go there voluntarily it becomes necessary to obtain a magistrate's order and remove her against her will.

That this procedure has to be used several times each year in this area is a sad reflection on our society, our social services, and the acceptability of our geriatric hospitals and old peoples homes. The present policy of using some small hospitals solely as geriatric units, instead of developing geriatric units within the precincts of the general hospital, involves risk of them acquiring a reputation as places for terminal care from which the only escape is in a coffin and will exacerbate the problem. Prejudice against County Council hostels is also a problem but a diminishing one, now that they are mostly small new units.

While it may seem intolerable that people should be allowed to deteriorate to the state which I have described, the alternative would involve an unacceptable infringement of personal liberty. We are all free to live as we like in our own homes so long as we respect other people's rights. Consequently it is only in extreme cases that we have any right to interfere with others.

One factor which contributes to this problem is our policy of deferring slum clearance action where the occupant of an unfit cottage says that she wishes to spend her remaining years there, and has been able so far to keep it clean and decorated. As her infirmities increase with age that cottage becomes more dangerous and difficult to manage and her standards fall. Both house and occupant deteriorate slowly at first, but once the old lady ceases to be able to climb the stairs to bed deterioration becomes very rapid. She may become so ashamed of the dirt that she is unwilling to let her neighbours in, and refuses the services of a home help. Often cases do not come to our notice until they are so bad that nobody can be found who would be willing to try and clean the house. Recently the Home Help supervisors have been able to deal with some of these by recruiting a team of two or three women who can work together and give each other moral support. Such teams have worked wonders. Their task is most unpleasant and they deserve our gratitude along with considerably more pay than they get! This system could be more widely used with advantage.

Expansion and improvement of the Home Help Service could ease pressure on both hostel and hospital beds. Instead, in 1968 we saw a cut in the provision as part of the County Council's "devaluation" economies. Even an improved home help service, however, could only help those old people whom we know to be in need. There is a real need for improved early case finding. The services for old people need not only to be expanded, but also enabled to "tout" for customers. A valuable service which each of us can render is to talk to old people, try to overcome their prejudices against seeking or accepting the kinds of help locally available, and to advise health or welfare officers of anyone who is

beginning to deteriorate and needs help. Many of the disabilities of old age can be eased, overcome or delayed if the right action is taken soon enough. We must ultimately aim to ensure that this occurs.

One aspect of the Council's housing policy which has not been stopped by current high interest rates is the provision of warden-supervised grouped dwellings for the elderly. It is very seldom that the occupant of a flat in such a unit deteriorates to the stage of requiring hostel accommodation. The morale and standards of living and of health of residents in grouped dwellings appears to be markedly superior to those of others of similar age remaining in their own homes. This may of course be partly due to "selection" of tenants for these units. It is clear, however, from the marked improvement noted in some people in the weeks following their admission that it is also at least partly due to the socialising effect of being brought into a community. Our existing units only provide limited communal amenities and their value is also restricted insofar as they are not suitable for people who are no longer able to shop and cook for themselves. The addition of a form of catering facility would enhance the value of such dwellings, and the possibility of a refrigerated vending machine and a microwave oven to enable hot meals to be obtained almost instantly at any time is well worth exploring. To make such provision economically feasible it would have to be used by a considerable number of people. This might be assured by making it available to other groups and by using it as the source of meals for the "meals on wheels" service.

Each year has its own individual flavour, and 1968 will be remembered for its two notable characteristics. These were the results of the adverse physical and economic climates.

Sometime in June 1968 easterly winds set in, and for the rest of the year the wind was almost entirely from that quarter. This area was consequently on a weather shore and experienced an unusually high rainfall, whose effects included surcharging of sewers, flooding, and the widespread pollution of underground water, and drew our attention to a number of weak points in our services.

Water Pollution

A considerable part of our area lies on the Wolds, where only a thin layer of topsoil covers the chalk. Over the whole of this area there is no river or stream because all the rain which falls percolates straight

into the ground. The water supplies for the area, both public and private, come from boreholes in the chalk or springs near the edge of the outcrop, and as the chalk is very porous and grossly fissured these water sources are susceptible to pollution. During recent years large areas of the Wolds have been used for growing peas for the frozen food industry. We had hoped that the introduction in 1967 of mobile vining machinery which scattered the haulm evenly on the ground where it could dry in the sun had finally solved the problem of the seasonal pollution of underground water which had earlier been traced to pea silage making. The coincidence of torrential rain with the 1968 pea harvest, however, prevented the haulm from drying, enabled it to act as a culture medium for bacteria like silage in stacks, and washed the bacteria into the chalk. As a result bacterial pollution of water sources was more widespread than has ever been noted before and the majority of the chalk boreholes yielded grossly polluted water containing high counts of E. coli. Water for the public water supplies is of course sterilised with chlorine before distribution, and so long as there is no plant failure the presence of bacteria in the raw bore water is not a direct danger to health. Pollution by bacteria and nutrients can, however, exert an indirect effect by diminishing the yield and impairing the taste of the water. For example, pollution of a chalk borehole at Wisbech in 1957 by pea viner effluent discharged into a hole in the chalk reduced the yield of one bore from 1.7 million gallons per day to 0.65 million gallons per day and of another from 1.2 m.g.d. to 0.3 m.g.d. due to mechanical obstruction by bacterial growth. Such an incident in our area could have serious consequences and the North Lindsey Water Board is attempting to make bye-laws to control discharges into quarries and reduce this hazard.

Owing to their remoteness many farms in the Wolds are unable to obtain water from a public main, and they rely upon private bores for their water. They use this water for drinking themselves and for watering their stock. Since the appearance of widespread pollution in July 1968, they have been asked to boil water before use but clearly this is not a satisfactory permanent arrangement. Installation of equipment to sterilise water automatically is the only satisfactory solution short of laying long and expensive connections to the nearest public mains. There is, however, an extraordinary reluctance to face facts, and people appear to assume that because their ancestors used water from the bore and survived it must be safe. They fail to appreciate that agricultural practices have so changed in the last 30 years as to vastly increase the hazard. The high costs of land, machinery and labour combined with excessive interest rates are forcing farmers to adopt more intensive methods and to grow different crops. The resulting wastes are much stronger and greater in amount than those

which resulted from traditional farming. River authorities prevent farmers from disposing of foul waste in surface streams and are forcing some to experiment with digestion tanks and sprays to distribute liquid manure over land - a system which can, in some conditions of wind, lead to serious harm to amenity and risk to the health of human populations. In an area like the Wolds where the chalk will quickly absorb large quantities of water effluent disposal is simple. Our experiences in tracing pollution from pea haulm, however, have shown that gross bacterial pollution can travel two miles underground in 3 to 5 days. As intensive livestock rearing becomes commoner there will be an increasing danger that germs from sick animals on one farm will appear in the water supplies of neighbouring farms and cause disease among both animals and humans. While the most obvious risk is from salmonellae it is conceivable that germs of other diseases might be spread in this way.

Clearly there is a need for action to correct this undesirable situation. Users of private boreholes should be induced either to equip them with automatic sterilising devices or to abandon their use, and the Council should consider changing their policy regarding acceptance of farm effluents into sewers. Unless we help the farmers in this way, and do so at a price which they can afford they will be forced by economic pressures to adopt less desirable methods of disposing of their wastes. This will lead to widespread smell nuisance in addition to endangering water supplies.

Flooding and Surcharging of Sewers

As we build more houses and roads the proportion of the countryside which can absorb and hold water decreases. The speed with which water runs off following rain is thus far greater than before. The position is further aggravated by the increasing installation of field drains in farmland. As a result ditches and surface water drains which were formerly adequate to take the run off after a rain storm are no longer able to take it all, and low lying areas tend to flood with surface water after rain to an extent which has not been known before. Clearly, when we build a road or a housing estate in future we should pay as much attention to improving and ensuring the adequacy of surface drainage as we do to foul drainage.

Most of the sewage schemes which we have built since the war have been designed on the "separate" system, and we have tried to economise on cost by only installing pipes and pumps to deal with the expected load of foul sewage. Our experiences over the years, and particularly during 1968 should by now have shown us the error of our ways. In many places surface drainage has proved inadequate and surface water has flooded areas and poured into manholes and gulleys connected to the foul water sewers.

The latter and their pumps being designed to deal only with small amounts of foul sewage have been over-loaded, and at points further down manhole covers have lifted and sewage has come out from gulleys and manholes to flood houses and gardens. It is hardly surprising that the unfortunate occupants of houses which have been flooded with diluted foul sewage protested to the Council, whose sewers conveyed this filth to them. Clearly, if risks to health are to be minimised adequate cleansing of properties and soft furnishings which have been affected by sewage is essential, and the Public Health Sub-Committee have discussed the possibility of providing a station at which carpets could be effectively cleaned, disinfected and dried.

Prevention, however, is infinitely better than just helping to clean up afterwards. In the past the thesis has been all too readily accepted that surcharging of our sewers with storm water was due to people improperly diverting roof water into foul water gulleys. After inspecting some of the areas flooded during the rains of 1968 I am satisfied that the real cause is the inadequacy of surface drainage allowing levels to rise until surface water flows directly into the foul drains. It would be unreasonable to expect people to be so self-sacrificing as to build dams round their foul gulleys and so flood their own homes in order to protect someone else further down the sewer. Probably the wisest course, although expensive, would be to abandon the "separate" system and install "combined" sewers of really adequate capacity in all future major development.

If the physical climate in 1968 was bad, the financial climate was even more harsh. Progress in the provision of environmental health services was seriously retarded by financial restrictions and by the excessive rates of interest charged on borrowed capital.

Experts tell us that the volume of world trade has increased out of proportion to the gold and dollars available to finance it; and this, combined with differences in national rates of industrial expansion and uncertainties about rates of exchange has upset the world economy. The nations instead of replacing inadequate gold reserves by an agreed printed alternative have bid against each other offering ever higher rates of interest to attract or retain funds.

Socially desirable expenditure, unlike investment in commerce or industry does not produce any short term dividend. High interest rates are therefore a strong disincentive to the building of roads and houses, schools and health centres. Schemes for improvements in sewage disposal, water supply, and the control of air pollution tend to be shelved.

High rates of interest result in the rich becoming wealthier at the expense of the less well-to-do. Their inflationary effects increase the risk of industrial dispute and cause the public to spend money before its purchasing value falls rather than save.

The solution of these problems is a matter for politicians and economists. We can only hope that they can come to some sort of agreement before too much harm has been done. In the meantime is there not a case for making low interest loans to local authorities for approved socially desirable projects, and confining the high interest disincentive to areas where it does less damage?

There is no limit to the amount of money which we can spend on our health service. One can spend many thousands of pounds preserving the life of one individual for a few years by means of kidney machine or heart transplant. The same amount of money might enable fifty men awaiting hernia operations to be treated sooner and sent back to work, or if spent on improving environmental services to reduce air pollution, increase the hardness of drinking water, and improve housing conditions it could increase the lifespan and improve the quality of life for an even greater number of people. It is one of the absurdities of our time that it is in the section of health expenditure which can offer the best return that the cuts are made in times of financial stringency. Like the original Cinderella the Public Health Service makes a more useful if humbler contribution to the welfare of the community than her sisters. Let us hope that the next Green Paper will presage her rescue from the scullery and give her a fair share of the estate!

Nuisances

The nuisances which give rise to the most public concern are often those least harmful to health. Smell emanating from the settling lagoons of the British Sugar Corporation factory outside Brigg, smells from unsatisfactory agricultural waste disposal, and grit from a cement works at South Ferriby all gave rise to considerable local clamour. In each case the complaints were fully justified.

Water which has been used to wash sugar beet is pumped into settling lagoons where some anaerobic digestion of organic material occurs, and a powerful and nauseating smell is produced. Unfortunately a developer has built houses very close to one of these lagoons. The smell is seasonal and people who had gone to live there became distressed when the start of the sugar beet season led to the appearance of this nuisance. The British Sugar Corporation undertook to try using chemical sprays to mask or

neutralise the smell on days when the wind blows towards the houses, and we are now waiting to learn whether this proves successful. This smell although extremely unpleasant probably only affects health indirectly, by impairing appetite.

Grit and dust from the cement works at South Ferriby is another example of a nuisance causing public complaint, but which probably has little direct influence on health. Cement dust and chalk dust are among the least harmful dusts, and there is no evidence of increased mortality from pulmonary disease in areas of cement manufacture. During reconstruction and enlargment of the South Ferriby factory the system of working was changed, and a stock-pile of chalk was made just outside the factory. Chalk was brought from the quarry by conveyor belt and tipped from a very considerable height. This gave rise to dust formation and emission, and caused the Parish Council to protest. Ultimately the firm concerned fitted a conical metal cover to their chalk stock-pile, and this combined with east winds and wet weather abated the nuisance.

Disposal of agricultural wastes, particularly pig manure and chicken manure produced in intensive livestock enterprises, like pea silage juices and vegetable processing effluents, can give rise to serious problems. Quantities of manure or effluent are produced which are too great to be disposed of onto land in the traditional way. Consequently farmers are having to find new ways of disposing of wastes. These are a source of frequent complaint, and present a most intractable problem.

Complaints of noise nuisance were also a feature of 1968. The noises giving rise to complaint varied widely, and usually proved to be of only moderate intensity when measured with the sound level indicator. Clearly we require different standards in different situations. Although sound of 85 db. may be tolerable for limited periods by day an irregular noise of a mere 50 decibels at night could render sleep impossible, and in an office a level of background noise of 60 decibels can render conversation difficult and prevent comprehension over the telephone. While physical damage to health does not occur at noise levels below 85 db. considerable annoyance, nuisance and harm to amenity can result from much lower intensities of sound in the wrong place or at the wrong time. The decibel scale by which sound is measured is logarithmic and unless this is understood can be misleading, since each 3 decibels represents a doubling of actual intensity. For example, a noise of 85 decibels is actually twice as intense as one of 82 decibels and four times greater than a noise of 79 decibels!

Let us hope that our inspectors may be able to spare sufficient time from their other duties to deal with some of these noise nuisances, and that some semblance of peace can be preserved in the countryside.

As usual housing inspection, meat inspection, nuisances, port health and food hygiene occupied much of the time of the district inspectors and as population and work load rise their ability to undertake other tasks is impaired.

During the year we were able to maintain steady progress with slum clearance, but as in the past the reluctance of some old people to be rehoused and of the Council to displace them proved an impediment.

The conversion of pail closets also proceeded satisfactorily. In addition to the conversions consequent on the installation of new sewers by the Council, conversions involving septic tank installation in parishes without sewers formed part of the improvements to property which were carried out with the aid of discretionary grants.

An interesting development in rodent control was the exercise in collaboration between the Council and the Ministry of Agriculture to render the parish of Alkborough with its 300 houses a "Rat Free Village". A detailed survey of the area, including some 3,000 acres of farm land was followed by intensive baiting for 18 days. Permanent baiting points were then established in order to try to prevent rats migrating to the area from elsewhere. We must hope that the demonstration will encourage farmers in neighbouring parishes, and that the borders of the rat-free zone can be extended year by year.

Some further progress was made with improving the Council's refuse collection and disposal service, although retarded by financial restriction and impeded by bad weather and sickness absences. The central tip at Messingham was commissioned, and apart from some trouble with wind-blown paper has proved reasonably satisfactory. Ministry consent was obtained for the first transfer station, and a start on the centralising of tipping should be made in 1969.

In order to comply with duties imposed by the Civic Amenities Act a special vehicle and a supply of large skips were obtained. By stationing these containers in villages remote from tips we hope thus to provide facilities for the deposition of scrap and rubbish. It is to be hoped that these will be used with care and discretion, and that nuisance will not be caused by careless spillage.

I am grateful to the entire staff of the Public Health Department for their work during 1968, and for their help and co-operation.

I am,

Your obedient servant,

J. S. Robertson.

Medical Officer of Health.

GENERAL DESCRIPTION OF THE DISTRICT

The Rural District of Glanford Brigg covers an area of 136,595 acres and has a population of 42,690 living in 41 parishes. The district is bounded on two sides by the Trent and Humber divided into two parts by the river Ancholme. To the west of this river the land slopes gently upward to the limestone and ironstone ridge which supports Scunthorpe and its steel industry. East of the Ancholme there is a chalk escarpment from the top of which the land slopes gently downwards to the north east until the level clay of the coastal plain overlies it.

Sites on the Humber bank in the eastern half of the district are now being developed by the oil, coal and gas industries. The Gas Board have built a plant for making gas from Naphtha at Killingholme, where the North Sea Gas pipeline comes ashore. A new oil refinery has been built and another is nearing completion, and the Coal Board are building a facility for loading coal into ships.

The district contains some of the best agricultural land in the country, and supports many kinds of farming, with crops as diverse as tulips, vegetables for the frozen food industry, cereals and hay, and there are also a number of units undertaking intensive livestock rearing.

Other industries include cement works chemical and fertiliser factories and quarrying and mining for chalk and ironstone. In addition to the oil jetties at Killingholme, for which the R.D.C. is the Port Authority, there are wharves or docks which are regularly used by shipping at New Holland, Flixborough and Gunness for which the Hull and Goole Port Authority is responsible.

Rateable value at 31st March, 1969 ..... £1,924,052

Product of a penny rate 1968/69 ..... £8,589

VITAL STATISTICS

	1966	1967	1968
Mid-year population	39,040	40,000	42,690
Live births	894	802	882
Stillbirths	9	10	16
Infant deaths under 4 weeks	10	14	12
Total deaths	413	392	399

	Legitimate			Illegitimate			Total
	Male	Female	Total	Male	Female	Total	
Live births	408	429	837	26	19	45	882
Stillbirths	11	5	16	-	-	-	16
Infant deaths under 1 year	10	7	17	-	-	-	17
Infant deaths under 4 weeks	6	6	12	-	-	-	12
Infant deaths under 1 week	6	6	12	-	-	-	12

	Glanford Brigg R.D.		England and Wales	
	1967	1968	1967	1968 (Prov.)
Crude Birth Rate	20.1	20.7	17.2	16.9
Corrected Birth Rate*	19.8	20.5	(17.2)	(16.9)
Stillbirth Rate	12.0	18.0	14.8	14.0
Infant Mortality Rate	21.0	19.0	18.3	18.0
Legitimate Infant Mortality Rate	18.0	20.3	17.86	
Illegitimate Infant Mortality Rate	68.2	-	23.67	
Neonatal Mortality Rate	17.5	13.6	12.5	12.3
Early Neonatal Mortality Rate	15.0	13.6	10.8	10.5
Perinatal Mortality Rate	27.0	31.0	25.4	25.0
Illegitimacy Rate	5.5	5.1	8.4	
Crude Death Rate	9.8	9.3	11.2	11.9
Corrected Death Rate*	10.7	10.2	(11.2)	(11.9)

* These corrections take account of the different proportions of old and young people in the area, and make resulting rate comparable with that for England and Wales. Thus a resort to which old people retire would have a high crude rate, but a low comparability factor would correct the false impression that this was an unhealthy area. The comparability factor for births in this district is 0.99 and 1.10 for deaths.

Causes of Death in the District during the year 1968

(Registrar General's figures)

Cause of Death	0-	1-	15-	25-	45-	65+	Total M	Total F
Tuberculosis, respiratory	-	-	-	-	1	-	1	-
Other tuberculosis	-	-	-	-	-	1	-	1
Cancer - Stomach	-	-	-	-	2	3	2	3
Cancer - Lung, bronchus	-	-	-	1	6	6	11	2
Cancer - Breast	-	-	-	2	6	6	-	14
Cancer - Uterus	-	-	-	-	2	-	-	2
Leukaemia	-	2	-	-	1	1	-	4
Other Cancers, etc.	-	-	-	2	15	19	12	24
Benign and unspecified neoplasms	-	-	-	1	-	-	-	1
Diabetes Mellitus	-	-	-	-	2	1	2	1
Other Endocrine etc. diseases	1	-	-	-	-	-	1	-
Anaemias	-	1	-	-	-	1	1	1
Mental disorders	-	-	-	-	-	1	-	1
Other diseases of the nervous sys.	-	1	-	1	-	3	1	4
Chronic rheumatic heart disease	-	-	-	-	2	2	1	3
Hypertensive disease	-	-	-	-	4	7	9	2
Ischaemic heart disease	-	-	-	-	22	75	52	45
Other forms of heart disease	-	-	-	-	1	13	3	11
Cerebrovascular disease	-	-	1	1	6	57	28	37
Other diseases of the circulatory sys.	-	-	-	-	1	11	8	4
Influenza	-	-	-	-	2	3	5	-
Pneumonia	1	-	1	-	1	22	15	10
Bronchitis and Emphysema	-	-	-	-	3	12	12	3
Asthma	-	1	-	-	1	-	-	2
Other diseases of the resp. sys.	1	-	-	-	1	2	2	2
Peptic ulcer	-	-	-	-	1	1	-	2
Intestinal obstruction and hernia	-	-	-	-	-	1	1	-
Cirrhosis of the liver	-	-	-	-	1	1	1	1
Other diseases of the digestive sys.	-	-	-	-	2	1	1	2
Nephritis and Nephrosis	-	-	-	-	1	1	1	1
Hyperplasia of the prostate	-	-	-	-	-	2	1	1
Other diseases, genito-urinary sys.	-	-	-	-	-	7	3	4
Diseases of musculo-skeletal sys.	-	-	-	-	1	-	-	1
Congenital anomalies	2	1	-	-	-	-	1	2
Birth injury, difficult labour, etc.	1	-	-	-	-	-	1	-
Other causes of perinatal mortality	9	-	-	-	-	-	5	4
Symptoms and ill-defined conditions	-	-	-	-	-	1	1	-
Motor vehicle accidents	-	-	4	-	7	2	11	2
All other accidents	2	-	-	1	-	2	2	3
Suicide and self-inflicted injuries	-	-	-	1	1	-	2	-
All other external causes	-	-	-	-	1	1	1	1
Total:	17	6	6	10	94	266	199	200

CAUSES OF DEATH AT VARIOUS PERIODS OF LIFE

(Locally compiled statistics)

Causes of Death	Age in Years				Total
	0-1	1-14	15-49	50+	
Infectious Diseases					
Tuberculosis, respiratory	-	-	-	1	1
Tuberculosis, other	-	-	-	1	1
Syphilitic disease	-	-	-	-	-
Diphtheria	-	-	-	-	-
Whooping Cough	-	-	-	-	-
Meningococcal Infection	-	-	-	-	-
Acute Poliomyelitis	-	-	-	-	-
Measles	-	-	-	-	-
Other infective and parasitic dis.	-	-	-	-	-
The Cancers					
Stomach	-	-	-	4	4
Lung and Bronchus	-	-	3	9	12
Breast	-	-	2	12	14
Uterus	-	-	-	2	2
Other	-	-	1	38	39
Leukaemia, Aleukaemia	-	2	-	2	4
Diabetes	-	-	-	1	1
Cardiovascular Diseases					
Vascular lesions of the C.N.S.	-	-	2	70	72
Coronary Disease, Angina	-	-	-	75	75
Hypertension with heart disease	-	-	-	11	11
Other Heart disease	-	-	1	34	35
Other Circulatory disease	-	-	-	11	11
Respiratory Diseases					
Influenza	-	-	-	5	5
Pneumonia	1	1	1	27	30
Bronchitis	-	-	-	15	15
Other	-	1	-	1	2
Ulcer of the Stomach and Duodenum	-	-	-	3	3
Gastritis, Enteritis and Diarrhoea	-	-	-	-	-
Nephritis and Nephrosis	-	-	-	8	8
Hyperplasia of Prostate	-	-	-	2	2
Pregnancy, Childbirth and Abortion	-	-	-	-	-
Congenital malformation	2	-	-	-	2
Other diseases	11	2	3	8	24
Motor vehicle accidents	-	-	5	7	12
All other accidents	3	-	1	4	8
Suicide	-	-	1	2	3
Homicide	-	-	-	-	-
Total:	17	6	20	353	396

NOTIFICATIONS OF INFECTIOUS AND OTHER DISEASES BY AGE GROUPS

(a) 1st, 2nd and 3rd Quarters

Disease	0-	1-	2-	3-	4-	5-	10-	15-	25-	45-	65-	N.K.	Total
Measles	12	42	46	46	35	136	16	4	-	1	-	6	344
Dysentery	4	9	8	6	3	11	-	3	13	1	-	3	61
Whooping Cough	5	1	3	2	3	6	2	1	1	-	-	1	25
Infective Jaundice	-	-	-	-	-	1	1	-	4	2	1	-	9
Scarlet Fever	-	-	-	3	-	2	1	-	-	-	-	-	6
Acute Pneumonia	1	-	-	-	-	-	-	-	-	4	1	-	6
Respiratory Tuberculosis	-	-	-	-	-	-	-	1	1	3	-	-	5
Non-Pulmonary Tuberculosis	-	-	-	-	-	-	-	-	-	-	1	-	1
Erysipelas	-	-	-	-	-	-	-	-	1	2	1	-	4
Puerperal Pyrexia	-	-	-	-	-	-	-	2	1	-	-	-	3
Food Poisoning	-	-	1	-	-	-	-	-	-	-	-	-	1
Total:	22	52	58	57	41	156	20	11	21	13	4	10	465

During the quarters ending 31.3.68, 30.6.68 and 30.9.68 there were no cases of the following diseases notified:

Acute Poliomyelitis; Diphtheria; Acute Encephalitis; Typhoid Fever; Paratyphoid Fever; Smallpox; Ophthalmia Neonatorum; Anthrax and Leptospirosis.

(b) 4th Quarter

Disease	0-	1-	2-	3-	4-	5-	10-	15-	25-	45-	65-	N.K.	Total
Measles	1	2	2	3	2	4	1	-	-	-	-	-	15
Dysentery	2	1	4	1	-	-	-	3	3	-	-	2	16
Whooping Cough	-	-	-	1	-	1	1	-	-	-	-	-	3
Infective Jaundice	-	-	-	-	-	2	2	3	1	-	-	-	8
Scarlet Fever	-	-	2	1	1	6	1	-	-	-	-	1	12
Meningitis	-	-	-	-	-	-	-	-	2	-	-	-	2
Acute Encephalitis	-	-	-	-	-	1	-	-	-	-	-	-	1
Total:	3	3	8	6	3	14	5	6	6	-	-	3	57

During the quarter ending 31.12.68 there were no cases of the following diseases notified:

Diphtheria; Acute Poliomyelitis; Smallpox; Ophthalmia Neonatorum; Anthrax; Yellow Fever; Leptospirosis; Paratyphoid Fever; Food Poisoning; Tetanus and Tuberculosis.

WATER

Bacteriological Examination

(a) Public Supplies

Barrow-on-Humber Bore

Presumptive Coli Count	"Raw" Water	Chlorinated Water
Less than 1 per 100 ml.	86	33
1 to 2 per 100 ml.	12	0
3 to 10 per 100 ml.	3	0
More than 10 per 100 ml. or E. coli type 1 present	27	0
Total:	128	33

Barton-on-Humber Bore

Presumptive Coli Count	"Raw" Water	Chlorinated Water
Less than 1 per 100 ml.	100	53
1 to 2 per 100 ml.	0	0
3 to 10 per 100 ml.	0	0
More than 10 per 100 ml. or E. coli type 1 present	3	0
Total:	103	53

Winterton Holmes Bore

Presumptive Coli Count	"Raw" Water	Chlorinated Water
Less than 1 per 100 ml	50	50
1 to 2 per 100 ml.	0	0
3 to 10 per 100 ml.	0	0
More than 10 per 100 ml. or E. coli type 1 present	0	0
Total:	50	50

(b) Private Supplies

Note:

When routine samples from Water Board sources indicated the presence of more widespread pollution than in former years an attempt was made to locate and sample all private sources in the affected area, and surveillance of affected sources was maintained. This table therefore relates to boreholes at special risk at a time when coincidence of heavy rain with pea harvesting had carried polluting material into the chalk.

Presumptive Coli Count	No. of Samples
Less than 1 per 100 ml.	102
1 - 2 per 100 ml.	7
3 - 10 per 100 ml.	1
More than 10 per 100 ml. or E coli type 1 present	84
Total:	194

Details of Domestic Supplies

Number of houses supplied from public mains - in the house . . . 96%

from an outside tap . . . 2%

Number of houses supplied from private sources 300

Number of houses with unsatisfactory supplies 300

CHEMICAL ANALYSES

(a) Barrow-on-Humber Bore

	Raw Water	Treated Water
Appearance	clear	clear
Colour	Colourless	colourless
Taste		normal
Smell	none	none
GENERAL CHEMICAL EXAMINATION	**Parts per Million**	
Reaction, pH Value	7.5	7.5
Free Carbon Dioxide as CO_2	10.0	10.0
Ammoniacal Nitrogen as N	0.016	0.016
Albuminoid Nitrogen as N	0.016	0.016
Nitrous Nitrogen as N	none	none
Nitric Nitrogen as N	2.98	2.73
Poisonous Metals (Lead)	less than 0.04	less than 0.04
Hardness (Calculated from Mineral Analysis) as $CaCO_3$	329.7.	73.9
Temporary	212.0	73.9
Permanent	117.7	--
Permanganate Figure (3 hours at 80°F)as O	0.32	0.48
Alkalinity as $CaCO_3$	212.0	222.13
Mineral Analysis		
Silica as SiO_2	4.00	5.00
Alumina	---	---
Iron Oxide	---	---
Calcium as Ca	126.90	27.60
Magnesium as Mg	3.10	1.21
Sodium as Na	8.34	135.12
Carbonates as CO_3	127.13	133.19
Chlorides as Cl	35.00	40.00
Nitrates as NO_3	13.17	12.08
Sulphates as SO_4	72.75	76.37
Fluorine as F by the distillation method	0.18	0.15
Manganese as Mn	none	none
Probable composition of Mineral constituents:-		
Silica	4.00	5.00
Alumina	---	---
Iron Oxide	---	---
Calcium Carbonate	212.02	68.93
Calcium Sulphate	103.10	4.20
Calcium Chloride	32.30	---
Magnesium Chloride	12.14	---
Sodium Carbonate	---	157.00
Sodium Sulphate	---	112.94
Sodium Chloride	8.77	65.94
Sodium Nitrate	18.06	16.56
	390.39	430.57

(b) Barton-on-Humber Bore

	Raw Water	Treated Water
Appearance	clear	clear
Colour	colourless	colourless
Taste		normal
Odour	none	none
General Chemical Examination		
	Parts per Million	
Reaction, pH value	7.4	7.3
Free Carbon Dioxide as CO_2	10.0	12.0
Ammoniacal Nitrogen as N	0.056	0.040
Albuminoid Nitrogen as N	0.032	0.064
Nitrous Nitrogen as N	none	none
Nitric Nitrogen as N	3.69	3.46
Poisonous Metals (Lead)	less than 0.04	less than 0.04
Hardness (Calculated from Mineral Analysis) as $CaCO_3$	305.7	147.9
Temporary	208.8	147.9
Permanent	96.9	none
Permanganate Figure (4 hours at 80°F) as O	0.28	0.24
Alkalinity as $CaCO_3$	208.8	203.7
Mineral Analysis		
Silica as SiO_2	5.00	3.00
Alumina	0.02	0.02
Iron Oxide	0.07	0.13
Calcium as Ca	121.13	58.92
Magnesium as Mg	0.77	0.17
Sodium as Na	27.97	98.70
Carbonates as CO_3	125.21	122.16
Chlorides as Cl	39.10	44.00
Nitrates as NO_3	16.33	15.32
Sulphates as SO_4	85.92	81.00
Fluorine as F (by the distillation method)	0.14	0.15
Manganese as Mn	0.012	0.036
Probable composition of mineral constituents		
Silica	5.00	3.00
Alumina	0.02	0.02
Iron Oxide	0.07	0.13
Calcium Carbonate	208.82	147.15
Calcium Sulphate	121.76	
Calcium Chloride	4.65	
Magnesium Carbonate		0.59
Magnesium Chloride	3.02	
Sodium Carbonate		59.20
Sodium Sulphate		119.79
Sodium Chloride	55.69	72.54
Sodium Nitrate	22.39	21.00
	421.42	423.42

c) Winterton Bore

	Raw Water	Treated Water
Appearance	faint trace of suspended matter	clear
Colour	faintly yellow	colourless
Taste		normal
Odour	none	none
General Chemical Examination	**Parts per Million**	
Reaction, pH value	7.2	7.6
Free Carbon Dioxide as CO_2	16.0	6.0
Ammoniacal Nitrogen as N	0.088	0.024
Albuminoid Nitrogen as N	0.104	0.040
Nitrous Nitrogen as N	none	none
Nitric Nitrogen as N	0.29	0.35
Poisonous Metal (Lead)	---	less than 0.04 ---
Hardness (Calculated from Mineral Analysis) as $CaCO_3$	519.6	124.0
Temporary	280.1	61.1
Permanent	239.5	62.9
Permanganate Figure (4 hours at 80°F) as O	0.16	0.36
Alkalinity as $CaCO_3$	280.1	61.1
Mineral Analysis		
Silica as SiO_2	5.00	4.00
Alumina	0.13	trace
Iron Oxide	0.76	none
Calcium as Ca	188.28	30.05
Magnesium as Mg	11.99	11.89
Sodium as Na	55.86	145.79
Carbonates as CO_3	167.97	36.65
Chlorides as Cl	71.00	74.00
Nitrates as NO_3	1.28	1.55
Sulphates as SO_4	249.20	263.36
Fluorine as F (by distilation method) ...	0.18	0.47
Manganese as Mn	0.122	0.012
Probable composition of mineral constituents		
Silica	5.00	4.00
Alumina	0.13	trace
Iron Oxide	0.76	none
Calcium Carbonate	280.14	61.12
Calcium Sulphate	258.45	18.95
Magnesium Sulphate	59.35	58.85
Sodium Sulphate	28.84	300.25
Sodium Chloride	117.05	122.00
Sodium Nitrate	1.75	2.12
	751.47	567.29

(d) Scotney Bore

	Raw Water
Appearance	faint trace of suspended matter
Colour	clear : faintly yellow
Smell	none
General Chemical Examination	**Parts per Million**
Reaction, pH Value	7.5
Free Carbon Dioxide as CO_2	10.0
Ammoniacal Nitrogen as N	0.480
Albuminoid Nitrogen	0.120
Nitrous Nitrogen as N	none
Nitric Nitrogen as N	0.25
Poisonous Metals (Lead)	---
Hardness(Calculated from Mineral Analysis) as $CaCO_3$	283.8
Temporary	283.8
Permanent	---
Permanganate Figure (4 hours at 80° F) as O	0.52
Alkalinity as $CaCO_3$	444.2
Mineral Analysis	
Silica as SiO_2	6.00
Alumina	none
Iron Oxide	2.00
Calcium as Ca	101.76
Magnesium as Mg	7.20
Sodium as Na	228.02
Carbonates as CO_3	266.37
Chlorides as Cl	52.00
Nitrates as NO_3	1.10
Sulphates as SO_4	250.85
Fluorine as F (by the distillation method)	0.55
Manganese as Mn	0.048
Probable composition of Mineral constituehts:	
Silica	6.00
Alumina	none
Iron Oxide	2.00
Calcium Carbonate	254.15
Calcium Sulphate	---
Calcium Chloride	---
Magnesium Carbonate	24.96
Magnesium Sulphate	---
Magnesium Chloride	---
Sodium Carbonate	169.98
Sodium Sulphate	370.97
Sodium Chloride	85.73
Sodium Nitrate	1.51
	915.30

AIR POLLUTION MEASUREMENTS

(a) Deposit Gauge Readings

Total Solids Tons/Sq. Mile/Month

Site	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Average
Kirton Sub-Station	4.10	5.63	6.46	9.74	5.33	6.49	6.22	8.94	22.79	28.02	6.13	5.80	9.64
Gainsthorpe Sewage Works	10.20	8.98	29.90	7.79	10.56	12.25	7.94	9.84	14.83	7.02	13.74	14.70	12.31
Huntcliffe S. M. School	6.59	7.48	20.20	9.54	9.62	10.37	7.45	9.60	8.31	7.22	7.19	8.00	9.30
Rainfall (ins.) at Kirton Sub-Station	.90	.50	.20	2.05	1.34	1.81	4.65	1.93	2.68	2.99	1.26	1.10	1.78

(b) Greased Plate Readings

Total Solids Tons/Sq. Mile/Month

Site	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Average
Garden at Kirton Lindsey	-	-	9.9	15.7	18.8	12.3	10.1	10.6	54.4	5.0	24.7	29.8	19.1
Kirton Sub-Station	2.8	4.1	7.5	5.6	7.2	15.5	5.0	9.2	5.1	2.8	6.5	4.2	6.3
Gainsthorpe Sewage Works	11.7	9.8	97.0	6.7	13.0	18.6	7.3	9.7	12.9	31.7	22.1	29.6	22.5
Huntcliffe S. M. School	14.1	11.8	13.4	9.5	9.0	14.9	6.5	7.8	5.7	3.5	12.2	9.4	9.8
Garage Roof, Hibaldstow	10.0	6.6	46.0	16.0	15.1	8.7	5.2	4.3	9.1	3.6	4.2	7.3	11.3
Garden Sth. Ferriby Sluice	76.4	30.8	222.8	58.9	43.3	80.6	12.1	39.0	27.1	75.0	7.8	33.2	58.9
Field, Sth. End, Sth. Ferriby	20.1	5.4	49.5	6.9	7.6	11.9	9.6	6.8	8.6	9.7	4.6	12.2	12.7
Farm, Winteringham Road	3.2	7.4	5.1	4.6	6.2	10.0	5.6	4.7	7.9	3.3	4.2	7.7	5.8
Croxton	-	-	-	-	-	26.8	4.5	5.0	6.6	13.2	3.7	4.0	9.1

FOOD AND DRUGS ACT, 1955

Analysis of Samples	No. of Samples
Milk	45
Processed Milk Products	55
Alcoholic Beverages	6
Tinned, Bottled, Dried Products	14
Non-Alcoholic Beverages	1
Meat and Fish Products	4
Sugar, Flour, Confectionery	5
Vinegars and Spices	2
Cereal Products	1
Miscellaneous	3
	136

Extraneous Matter in Food

Fly embedded in sausage - warning issued to manufacturer/retailer.

Bilberry and Apple pie affected by mould - legal proceedings, manufacturer fined.

Unsatisfactory Food and Drugs Samples

Sausage - sample was deficient in meat content - warning issued to manufacturer/retailer.

Milk (Special Designation) Regulations

	No. of Samples
Pasteurised Milk	270
Sterilised Milk	60
	330

One sample failed the phosphatase test for pasteurised milk the remainder were satisfactory.

Six samples were taken for biological examination.

(Included by kind permission of the County Medical Officer of Health, Dr. C.D.Cormac)

ANNUAL REPORT OF THE CHIEF PUBLIC HEALTH INSPECTOR 1968

HOUSING

Total number of dwelling-houses and flats in the district	15,171
Total number of houses erected during the year -	
By the local authority	250
By other local authorities	Nil
By other bodies or persons	422
Number allocated for replacing houses subject to Demolition Orders or otherwise demolished	15

Housing Repairs and Rents Acts, 1954 - 57

Number of certificates of disrepair issued	Nil

Inspection of dwelling-houses during the year

Total number of dwelling-houses inspected for housing defects (under the Public Health or Housing Acts)	199
Number of inspections made for the purpose	420

Remedy of Defects during the year with service of formal notices

Number of defective dwellings rendered fit in consequence of informal action by the local authority or their officers	60

Action under Statutory Powers during the year

(1) Proceedings under the Public Health Acts:

Number of dwelling-houses in respect of which notices were served requiring defects to be remedied	18
Number of dwelling-houses in which defects were remedied after service of formal notices	3

(2) Proceedings under the Housing Acts:

Number of dwelling-houses in respect of which notices were served requiring repairs	Nil
Number of dwelling-houses which were rendered fit after service of formal notices	Nil
Number of unfit houses purchased by the local authority in accordance with the Housing Acts	Nil
Number of certificates of disrepair issued	Nil

(3) Slum Clearance - proceedings under the Housing Acts:

Number of dwelling-houses in respect of which Demolition Orders were made	33
Number of dwelling-houses demolished in pursuance of Demolition Orders	6
Number of dwelling-houses, or parts, subject to Closing Orders	27
Number of dwelling-houses, or parts, rendered fit by undertakings ...	2
Number of dwelling-houses included in confirmed Clearance Orders ...	Nil
Number of dwelling-houses demolished in pursuance thereof	1
Total number of dwelling-houses on which Demolition Orders are operative and which are still occupied except under the provisions of Section 34, 35 and 46 of the Housing Act 1957	1
Total number of dwelling-houses occupied under Section 34, 35 and 46 of the Housing Act, 1957	Nil
Houses demolished or closed voluntarily by owners which would otherwise have been the subject of statutory action to secure demolition or closure	2

(4) Nissen Huts or other similar hutments:

Number still occupied	2

(5) Estimated number of dwellings, excluding those under (4) above, remaining to be dealt with under -

The Housing Act, 1957, Sections 16 and 18	310
The Housing Act, 1957, Section 42	6

Housing Acts - Overcrowding

Number of cases of overcrowding relieved during the year	1
Number of persons concerned in such cases	8
Number of dwellings overcrowded at the end of the year	3
Number of persons dwelling therein	27

Housing Acts 1949 - 59

Number of dwellings for which applications for grants have been received -

(a) Standard Grant	63
(b) Discretionary Grant	54

Number of houses owned by the local authority which have been the subject of grant aid by the Ministry	Nil

Moveable Dwellings, tents, vans, etc.

Caravan Sites and Control of Development Act, 1960:

Number of site licences	40
Total number of caravans permitted under such licences	540

Number of inspections made during the year -

(a) Sites	47
(b) Caravans	141

Number of contraventions remedied	7
Number of caravans on sites exempt from licence	21

Public Health Act, 1936:

Number of site licences	Nil
Number of individual licences	Nil

FOOD PREMISES

Bakehouses

Number in the district	6
Number of inspections made	9
Number of contraventions found	1
Number of defects remedied	1

Ice Cream

Number of manufacturers on the register	1
Number of premises licensed for the sale of ice cream	125
Number of inspections made	65
Number of samples taken	7
Number of contraventions found	Nil

Meat Products

Number of premises registered for the manufacture of meat products	26
Number of inspections made	71
Number of contraventions found	6
Number of contraventions remedied	6

Other Food Premises

Number of other food premises	138
Number of inspections made	179
Number of contraventions found	36
Number of contraventions remedied	27

Slaughterhouses

Number licensed	- Abbattoir type	Nil
	Private (individual)	5
Number operated by the local authority		Nil

UNSOUND FOOD

(a) Meat Inspection

	Cattle excluding Cows	Cows	Calves	Sheep and Lambs	Pigs
Number killed	2,430	30	8	3,750	4,252
Number inspected	2,430	30	8	3,750	4,252
All diseases except Tuberculosis and Cysticerci: Whole carcases condemned	-	-	-	2	1
Carcases of which some part or organ was condemned	118	2	-	16	98
Percentage of the number inspected affected with disease other than tuberculosis and cysticerci	4.85	6.66	-	.48	2.32
Tuberculosis only: Whole carcases condemned	-	-	-	-	-
Carcases of which some part or organ was condemned	-	-	-	-	13
Percentage of the number inspected affected with tuberculosis	-	-	-	-	3
Cysticerosis: Carcases of which some part or organ was condemned	3	-	-	-	-
Carcases submitted to treatment by refrigeration	3	-	-	-	-
Generalised and totally condemned	-	-	-	-	-

Method of disposal of condemned meat: Collected by Animal By-Products firm.

(b) Other Foods Condemned

3 x 1 lb. ham, cooked
8 tins fruit cocktail - 15½ ozs.
1 tin fruit cocktail - 1lb. 14 ozs.
4 tins fruit cocktail - 7½ ozs.
6 tins of ham (1lbs.)
2 tins corned beef - 12 ozs.
5 tins tomatoes (8 ozs)
1 tin tomatoes (14 Ozs)
2 - 8 ozs. cod in batter.
6 - 7½ oz. plaice fillets.
11 x 9 ozs. fish fingers.
6 x 7 oz. cod steaks.
4 - 5 ozs. chicken pies.
6 x 8 oz. cod portions.
11 x fish fingers.
3 x 14 ozs. cod steaks.
10 x 12 ozs. faggotts in gravy.
13 - 5½ oz. fish fingers.
7 x 10 oz. sausage savories.
4 - 1 oz. beef burgers.
1 x 5 sausage savories.
3 x 9 oz. rissoles.
2 x 4½ oz. rissoles.
3 x 5 ozs. chicken and mushroom casseroles.
2 x 4 oz. cheese burgers.
1 x 4 oz. beef slices.
6 x 6½ oz. sausages.
1 x 10 oz. sausages.
2 x 8½ oz. chicken quarters.
5 pk. 5 corn on the cob.
2 x sweet corn.
11 x 6 oz. orange juice.
2 pks. 5 sausage rolls.
1 pkt. sausage savories.
4 x ¾ lb. chips.
11 x ½ lb. chips.
13 x 4 oz. sliced beans.
19 x ½ lb. brussel sprouts.
6 x ½ lb. peas.
2 x small broad bean
1 small sweet corn.
8 x ¼ lb. garden peas.
11 x 5 oz. garden peas.
6 x 8oz. raspberries.
3 x 2/3d. ice cream.
1 x 13 oz. ice cream roll
48 lollipops.
36 x 12 oz. ice cream.
7 x 2/8d. fish fingers 10's
2 x 1/8d. haddock portions.
12 x 1/7d. fish fingers 6's.
3 x 2/1d. haddock portions.
4 x 2/11d. fillet plaice
4 x 2/3d. cod fillets.
2 x 2/6d. cod portions.
1 x 2/4d. cod steak.
2 x 2/1d. kipper fillets.
1 x £1 large prawns.
2 x 7/6d. large scampi.
3 x 5/2d. small scampi.
1 x 6/2d. small prawn.
5 x 6d. fish cakes.
3 x 3 lbs. 10 ozs. chicken.
1 x 3 lbs. 10 oz. chicken.
9 x 3/6d. beef burgers 4's.
3 x 2/3d. sausage rolls.
1 x 1/8d. cornish pastry.
5 x 1/2d. puff pastry.
1 x 2/4d. potato fries.
9 x 2/2d. green beans.
1 x 1/2d. small beans.
8 x 1/- peas.
3 x 1/11d. mixed vegetables.
2 x 1/9d. broad beans.
2 x 1/6d. peas.
2 x 1/5d. spinach.
1 x 3/2d. corn on the cob.
3 x 2/3d. cream cakes.
3 x 3/1d. raspberries - 8 oz.
6 x 1/11d. cream.
1 x 2/6d. strawberries.
1 x 2/6d. blackcurrants.
10 x 8d. ice creams.
3 x 1/8d. ice creams.
6 x 2/- lemon mousse.
4 x 2/- strawberries.
2 x 2/3d. ice cream.
5 lbs. strawberries at £1.

Method of disposal of condemned food (other than meat): Controlled Tipping.

DRAINAGE AND SEWERAGE

Closets

Number of houses with privy vaults in the district	3
Number of houses with pail closets in the district	502
Number of caravans with pail closets in the district	186
Number of houses with water closets in the district	14,483
Number of water closets substituted for pail closets and privy vaults	90

The Council operates a pail closet emptying service.

Cesspools and Septic Tanks

Number of cesspools and septic tanks emptied, cleansed, etc.	551
Number of cesspools and septic tanks abolished	177

The Council operates a cesspool/septic tank emptying service using two vehicles.

Sewerage and Sewage Disposal

Parts of the district urgently requiring public sewers and/or treatment works for public health reasons:

Saxby, Bonby, Worlaby, Elsham, Redbourne, Appleby, Flixborough, Cadney and West Halton.

GENERAL

Offensive Trades.

Number of premises in the district	1
Number of inspections made	1
Number of contraventions remedied	Nil

Knackers Yards

Number licensed	1
Number of inspections made	1
Number of contraventions remedied	Nil

Offices, Shops and Railway Premises Act, 1963

Number of premises licensed	145
Number of inspections made	77
Number of defects found	22
Number of defects remedied	17

Disinfestation and Disinfection

Number of premises subject to disinfestation	10
Number of rooms or premises disinfected	5
(a) Infectious disease other than tuberculosis	5
(b) Tuberculosis	Nil

Refuse Collection and Disposal

Number of premises from which refuse is collected	98%
Frequency of collection	12 days
Type of receptacle used	40% paper sacks 60% bins
Method of disposal	Semi-controlled and controlled.
Number of tips	5
Number of refuse collection vehicles	7
Estimated amount of refuse disposed of during the year on local authority tips	12,000 tons

Details of Nuisances Abated

Nuisance	After informal intimation	After Statutory Notice
Refuse	3	-
Foul ditches, ponds and stagnant water	9	-
Drainage	9	-
Poultry and Animals	4	-
Dangerous premises	-	-
Miscellaneous Nuisance	5	-
Total:	30	-

Rodent Control

Number of rodent operatives employed	1
Number of premises treated - (a) dwelling-houses	320
(b) other premises	4

The service covers domestic and business premises.

There are no serious reservoirs of rats in the district.

Atmospheric Pollution

Number of visits made	55
Number of nuisances found	Nil
Number of nuisances abated	Nil
Number of smokeless zones in the area	3
Number of houses in smokeless zones	2,119

Noise Abatement Act, 1960

Number of complaints received	10
Number of nuisances found	5
Number of nuisances abated	5

FACTORIES ACT, 1961

Part 1 of the Act

1. Inspections for purposes of provisions as to health.

Premises	Number on Register	Number of		
		Inspections	Written Notices	Occupiers Prosecuted
i. Factories in which Section 1, 2 3, 4 and 6 are to be enforced by the local authority	2	4	-	-
ii. Factories not included in (i) in which Section 7 is enforced by the local authority.	88	44	-	-
iii. Other premises in which Section 7 is enforced by the local authority (excluding outworkers' premises).	-	-	-	-
Total:	90	48	-	-

2. Cases in which defects were found.

Particulars	Number of cases in which defects were found				Number of cases in which pro-secution was instituted
	Found	Remedied	Referred To H.M. Inspector	Referred By H.M. Inspector	
Want of cleanliness	-	-	-	-	-
Overcrowding	-	-	-	-	-
Unreasonable temperature	-	-	-	-	-
Inadequate ventilation	-	-	-	-	-
Ineffective drainage of floors	-	-	-	-	-
Sanitary Conveniences:					
(a) Insufficient	6	6	-	-	-
(b) Unsuitable or defective	-	-	-	-	-
(c) Not separate for sexes	1	1	-	-	-
Other offences against the Act (not including offences relating to Out-work)	3	3	-	-	-
Total:	10	10	-	-	-

3. **Part VIII of the Act**

Details of Outwork (Sections 133 and 134) carried on in the district.

Number of out-workers in August list required by Section 133 (1) (c) - 1

Nature of work - Making wearing apparel, etc.

Number of cases of default in sending lists to the Council - Nil

Number of prosecutions for failure to supply lists - Nil

Number of instances of work in unwholesome premises - Nil